

CEMP-RT

DEPARTMENT OF THE ARMY  
U.S. Army Corps of Engineers  
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ETL 1110-1-154

Technical Letter  
No. 1110-1-154

28 February 1994

Engineering and Design  
STANDARD OUTLINES FOR SCOPES-OF-WORK  
FOR INVESTIGATIONS AND STUDIES  
AT HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW) SITES  
UNDER CERCLA (SARA), RCRA, AND NEPA

1. Purpose.

a. This letter transmits a package of detailed standard outlines for scopes-of-work (SOWB) to be used in obtaining contract services and defining in-house activities to perform investigations and studies at Hazardous, Toxic, and Radioactive Waste (HTRW) sites. Outlines are provided for performing the investigations and studies under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) and the Resource Conservation and Recovery Act of 1976 (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). Provisions are included in the outlines to ensure the requirements of the National Environmental Policy Act (NEPA) are fulfilled.

b. The outlines are intended to be a guide to format and a checklist of topics to be addressed in a SOW for contract (or in-house) support to ensure that the work:

- (1) addresses all aspects of the problem,
- (2) is technically accurate,
- (3) meets regulatory requirements, and
- (4) is appropriately coordinated with the customer, the regulators, the public, and within USACE.

2. Applicability. This letter applies to HQUSACE/OCE elements, major subordinate commands, districts, laboratories, and field operating activities (FOA) having HTRW investigation, design and remedial action responsibility within the military or civil works programs.

ETL 1110-1-154  
28 Feb 94

3. References. Documents referenced in this ETL are listed. Additional documents useful in preparation of HTRW SOWs are provided at enclosure 1.

a. Public Law (FL) 96-510, Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended by FL 99-499, the Superfund Amendments and Reauthorization Act of 1986.

b. FL 91-190, National Environmental Policy Act of 1969 (NEPA).

c. FL 94-580, Resource Conservation and Recovery Act of 1976 (RCRA) as amended by FL 98-616, the Hazardous and Solid Waste Amendments of 1984.

d. 40 Code of Federal Regulation (CFR) 260 through 268 EPA Regulations Implementing RCRA.

e. 40 CFR 300 through 311 EFA Regulations Implementing CERCLA.

f. 40 CFR 1500 through 1508 Council on Environmental Quality (CEQ) Regulations Implementing NEPA.

g. ER 1110-1-263, Chemical Data Quality Management for Hazardous Waste Remedial Activities.

h. Memorandum, CEMP-R, 27 February 1991, subject, Requirement to Consider Innovative Technology in Scopes of Work for USACE Hazardous and Toxic Waste Programs.

4. Terminology and Definitions. Refer to the current HTW Management Plan for selected definitions. Acronyms are provided as enclosure 18.

5. Discussion.

a. Separate outlines are provided as enclosures for the following types of studies:

Remedial Investigation/ Feasibility Study (RI/FS)	- encl. 2
Preliminary Assessment/ Site Inspection (FA/SI)	- encl. 3
Engineering Evaluation/ Cost Analysis (EE/CA)	- encl. 4
RCRA Facility Assessment (RFA)	- encl. 5

RCRA Facility Investigation (RFI) - encl. 6  
RCRA Corrective Measures Study (CMS) - encl. 7

b. Not all topics in the outlines are appropriate for each project. In most cases, only a subset of the topics will be required. Under some circumstances, additional scope topics will have to be developed to supplement those presented here. The outlines are meant to be edited or supplemented as appropriate for the project at hand.

c. The tasks and submittals required of the contractor are to be described first in the SOW. The technical details of how the tasks are to be executed are provided last.

d. The outlines are supplemented by text describing both the typical requirements and the appropriate sources of input for each outline topic. This explanatory text is separated from the outline contents by rows of asterisks. This text is written solely for the benefit of the Corps personnel preparing the scope. It is not intended for the contractors' information. The explanatory text provided under each topic is intended to:

- (1) Discuss the requirements and typical level of detail.
- (2) List related topics that should be cross referenced.
- (3) Discuss typical submittal requirements, if any, for the task described.
- (4) Identify the appropriate technical personnel to be used as a source for the text where appropriate.
- (5) Identify the support or coordination typically required from outside agencies or entities such as the installation to complete the requirements.
- (6) Provide useful information or warnings to assist in preparing a successful SOW.

e. Some sample language for certain SOW topics has been and will be provided as enclosures to this letter. This language is not meant to be used without modification, but is meant as a guide. Actual site/project characteristics must be addressed under each topic. These enclosures do not address topics which would include language that varies widely depending on the project or the USACE command. These enclosures include:

ETL 1110-1-154  
28 Feb 94

Health and Safety SOW Language	-encl. 8
Chemistry Technical Requirements	-encl. 13.

f. In addition, enclosures are provided which present general guidance relevant to successful scoping, including:

Checklists for Geophysics at HTRW Sites	-encl. 9
Checklists for Ground Water Modeling at HTRW Sites	-encl. 10
Alternative Development and Selection	-encl. 11
Treatability Studies and Treatability Study Reports	-encl. 12
Suggested Scope-of-Work Borehole Logging Requirements	-encl. 14
Regulatory Response Authorities	-encl. 15
Air Pathway Assessment	-encl. 16
Checklist for Review of Workplans	-encl. 17
Summary of Acronyms	-encl. 18

g. The outlines discuss contractor planning submittals that are consistent with existing USACE Engineer Regulations, including the requirements in ER 1110-1-263 to provide a Chemical Data Acquisition Plan. Future guidance will likely require changes in the nature of the plans. These changes are intended to better reflect a trend toward the use of an overall project plan including individual sections for laboratory analyses, field activities, health and safety, and community relations.

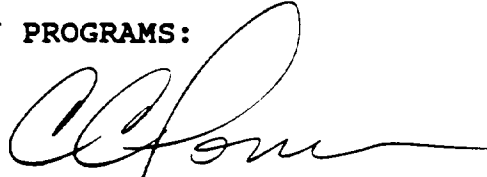
#### 6. Actions Required.

a. The topics listed in the outlines are to be considered in preparation of SOWs. It is strongly recommended that input be sought from the appropriate technical staff within USACE during the preparation of the technical portions of the SOWs. The involvement of in-house technical expertise in scoping an HTRW project is essential to providing a cost-effective, high quality service to the customer and to providing quality reviews of subsequent submittals.

b. SOWs are to be developed for work under references 3.a. through 3.g.

c. In the course of developing SOWs based on these standard outlines, consideration of innovative technology should be promoted in accordance with reference 3.h.

**FOR THE DIRECTOR OF MILITARY PROGRAMS:**



**CARY JONES, P.E.**

**18 Enclosures**

Encl 1 -	References	Chief, Environmental Restoration
Encl 2 -	RI/FS	Division
Encl 3 -	PA/SI	Directorate of Military Programs
Encl 4 -	EE/CA	
Encl 5 -	RCRA FA	
Encl 6 -	RCRA FI	
Encl 7 -	RCRA CMS	
Encl 8 -	Health & Safety SOW	
	Language	
Encl 9 -	Checklists for Geophysics	
	at HTRW Sites	
Encl 10 -	Checklists for Ground Water	
	Modeling at HTRW Sites	
Encl 11 -	Alternative Development &	
	Selection	
Encl 12 -	Treatability Studies and Treat-	
	ability Study Reports	
Encl 13 -	Chemistry Technical Requirements	
Encl 14 -	Suggested Scope-of-Work Borehole	
	Logging Requirements	
Encl 15 -	Regulatory Response Authorities	
Encl 16 -	Air Pathway Assessment	
Encl 17 -	Checklist for Review of Workplans	
Encl 18 -	Summary of Acronyms	